FINAL REPORT

TO

THE OFFICE OF GRANTS AND RESEARCH CONTRACTS

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

(8) (NGR-10-007-005)

FROM

~~THE UNIVERSITY OF~~ (1) MIAMI Univ,

Coral Gables, ~~Florida~~ FL MW 4656 74

R. W. Bagley (5)
Professor of Mathematics
Principal Investigator

(7a) [1966]

(7b) 4 P

(7c) N/a

(3) see front page

Final Report

on

NGR 10-007-005

Since essentially all the work accomplished under this contract was reported on in a progress report submitted in October, 1965, the final report takes the form of a short discussion of the present status of the papers prepared for publication.

The major portion of the work accomplished under NGR -10-007-005 is contained in the following four papers:

1. Left almost periodicity does not imply right almost periodicity, Bulletin of the American Mathematical Society 72 (1966) pp.314-316 (T. S. Wu).
2. Expansive automorphisms in compact groups, accepted by Mathematica Scandinavica (T. S. Wu).
3. Topological groups with equal left and right uniformities, submitted to Proceedings of the American Mathematical Society (R. W. Bagley and T. S. Wu).
4. Equicontinuity in function spaces (R. W. Bagley and J. S. Yang).

Reprints of the first paper have already been sent to the Technical Reports Officer, NASA, as well as preprints of the results in the second and third papers. The fourth paper is still under preparation and will be submitted for publication early this fall.

Perhaps the most significant results obtained are contained in the first and third papers which are more closely related than the titles indicate. The question answered in the first paper was of interest to several mathematicians (The question of whether or not left and right almost periodicity are equivalent was posed in the paper, Minimal sets: An introduction to topological dynamics, Bulletin of the American Mathematical Society 64 (1958), 336-351.) The original idea involved in answering this question came from the early results of the third paper listed above.

The fourth paper contains a large portion of Dr. J. S. Yang's Ph. D. dissertation. Dr. Yang was supported by this grant during part of the time he was writing his dissertation.

It was expected that by the time this final report became due a referee report on the third paper would be in hand. Unfortunately this prediction was faulty. To date no word from the referee on this paper has been received. Since the preprint of this paper was sent to NASA some revisions have been made and an error has been corrected. Therefore as soon as reprints are available they will be mailed to the Technical Reports Officer.